

(TITLE OF THE DOCUMENT) Specification

(TITLE OF THE INVENTION) Ink Cartridge Reproducing Device
and Its Reproducing Method

(SCOPE OF THE PATENT CLAIM)

(Claim 1) An ink cartridge reproducing device wherein an ink cartridge includes a memory section for memorizing information of use of the ink cartridge such as information of use history or the like and can supply ink to printing means of an ink jet recording apparatus; and reading of the information of use of the ink cartridge from said memory section in the ink cartridge, judgment of a reproducing method, writing of reproduction information are made possible.

(Claim 2) The ink cartridge reproducing device according to Claim 1, wherein said information of use represents the number of recycles of the ink cartridge.

(Claim 3) The ink cartridge reproducing device according to Claim 1, wherein said information of use represents a production date and recycle date of the ink cartridge.

(Claim 4) A method for reproducing an ink cartridge which is a method for recycling an ink cartridge after use, wherein possibility and impossibility of recycle of the ink cartridge and the reproduction condition are determined by comparing the reproduction information which is necessary for recycle of the ink cartridge and memorized in the memory section of said ink cartridge so that it can be rewritten with set information stored in the ink cartridge reproducing device.

(Claim 5) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information memorized so that it can be rewritten is the information of

use and said set information stored in the ink cartridge reproducing device is the condition capable of recycle.

(Claim 6) The method for reproducing the ink cartridge according to Claim 4, wherein the reproduction information capable of being rewritten represents the number of recycles of the ink cartridge and said set information represents the number capable of recycle.

(Claim 7) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information capable of being rewritten represents a production date and recycle date of the ink cartridge and said set information presents limit of lifetime.

(Claim 8) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information capable of being rewritten represents an ink end date of the ink cartridge and said set information represents the number of dates which elapses after the ink end date.

(Claim 9) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information capable of being rewritten represents using environment information of the ink cartridge and said set information represents a severe environment value.

(Claim 10) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information represents judgment of whether ink in the ink cartridge after use is extracted or its ink cartridge is cleaned.

(Claim 11) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information represents a cleaning time period of the ink cartridge after

use.

(Claim 12) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information represents the ink charging amount of the ink cartridge.

(Claim 13) The method for reproducing the ink cartridge according to Claim 4, wherein said reproduction information represents member exchanging condition of the ink cartridge.

(Claim 14) The ink cartridge reproducing device according to Claim 1, wherein said reproduction information represents the recycle number of the ink cartridge.

(Claim 15) The ink cartridge reproducing device according to Claim 1, wherein said reproduction information represents a recycle date of the ink cartridge.

(Claim 16) The ink cartridge reproducing device according to Claim 1, wherein said reproduction information represents the cleaning number of the ink cartridge and cleaning condition when the ink cartridge is reproduced.

(Claim 17) The ink cartridge reproducing device according to Claim 1, wherein said reproduction information represents the ink charging amount when the ink cartridge is reproduced.

(Claim 18) The ink cartridge reproducing device according to Claim 1, wherein said reproduction information represents information of the member exchanged when the member exchange is required during reproduction of the ink cartridge.

(DETAILED DESCRIPTION OF THE INVENTION)

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(Technical Filed of the Invention)

The present invention belongs to a technical field